

REMARKS

Applicant would like to thank the Examiner for the detailed remarks. Figure 4B has been amended to change the reference numeral 44 at the bottom of the figure to reference numeral 50. Figure 5A has been amended to change reference numeral 64 to reference numeral 64b. Applicant has included a copy of the amended figures. New claims 22-25 have been added and are supported by Figures 2, 4a, 4b, 6, and 8, and paragraph 30.

Claims 1, 2, 6-9, 18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Schlüter (3975128). Claims 1 and 6 have been amended to recite that an end segment of an injection piston includes an arcuate portion, as previously put forth in dependent claims 19 and 21. Schlüter does not disclose an injection piston including an end segment having an arcuate portion. Schlüter discloses “a piston 3 having a planar end face 7” (column 3, lines 12-13) wherein the piston 3 “is advanced until its end face 7 lies flush with the wall 13 of the chamber 12” (column 3, lines 10-12). Schlüter does not disclose that the end face 7 of the piston 3 is arcuate. Therefore, Schlüter does not anticipate the claimed invention, and applicant respectfully requests that the 102(b) rejection be withdrawn.

Claims 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schlüter (3975128) in view of Walker (3655208) and Jepsen (3373999). The claimed invention is not obvious. Schlüter, Walker, and Jepsen do not disclose an injection piston including an end segment having an arcuate portion. Schlüter discloses “a piston 3 having a planar end face 7” (column 3, lines 12-13). Walker discloses a piston 16 having a planar end face (Figures 1, 2). Jepsen discloses a piston 10 having a planar end face (Figure 3). Neither of the references shows an injection piston including an end segment having an arcuate portion, and therefore the references taken together do not teach claims 1 and 6.

Additionally, it would not be obvious for one of ordinary skill in the art to modify the end segment 7 of the piston 3 of Schlüter to include an arcuate portion to conform to the shape of the quieting chamber 12 as the Examiner argues. Schlüter teaches “a piston 3 having a planar end face 7” (column 3, lines 12-13) wherein the piston 3 “is advanced until its end face 7 lies flush with the wall 13 of the chamber 12” (column 3, lines 10-12). If the planar end face 7 of the piston 3 of Schlüter was modified to have an arcuate portion, the planar end face 7 would no longer be planar and would no longer lie flush with the wall 13 of the chamber 12 as required.

The modification suggested by the Examiner would be incompatible with the teachings of Schlüter, and therefore would not be obvious. Applicant respectfully requests that the 103(a) rejection be withdrawn.

Claims 3-5, 10 and 15-17 are also rejected under 35 U.S.C. 103(a) as being unpatentable over Schlüter (3975128) in view of Walker (3655208) and Jepsen (3373999). Claims 3-5, 10 and 15-17 depend on allowable claims 1 and 6 and are allowable for the reasons set forth above. Applicant respectfully requests that this rejection be withdrawn.

Thus, claims 1-10, 15-18, 20, and 22-25 are in condition for allowance. No additional fees are seen to be required. If any additional fees are due, however, the Commissioner is authorized to charge Deposit Account No. 50-1482, in the name of Carlson, Gaskey & Olds, P.C., for any additional fees or credit the account for any overpayment. Therefore, favorable reconsideration and allowance of this application is respectfully requested.

Respectfully Submitted,

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Dated: May 11, 2007